UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman; Suedeen G. Kelly, Marc Spitzer,

and Philip D. Moeller.

PJM Interconnection, L.L.C.

Docket Nos. ER03-1101-009

ER03-1101-010

ORDER ON COMPLAINCE FILINGS

(Issued July 27, 2006)

1. On March 22, 2005, PJM Interconnection, L.L.C. (PJM) submitted its third six-month report on the effects of PJM's credit policies on virtual traders (Third Update Report), as required by the Commission's orders issued in this proceeding on September 22, 2003 and December 20, 2004. On September 22, 2005, PJM submitted its fourth six-month report (Fourth Update Report). For the reasons discussed below, we will accept PJM's filings.

Background

2. On July 22, 2003, PJM proposed a number of revisions to its credit policy to address the increased financial risks posed to PJM's market participants by virtual trading activities in PJM's Day Ahead Market. In the September 22, 2003 Order, we agreed with PJM that its prior credit requirements had failed to adequately address these risks. However, we also found that PJM had failed to support its proposed use of an aggregated four-day period to determine a participant's virtual credit exposure. We held that the assessment period applicable to PJM's credit screens should not exceed two days (*i.e.*, the current day and the prior day) and questioned whether PJM's risk exposure may in fact be even less, *i.e.*, whether the two-day collateralization requirement we were accepting, subject to condition, should be even further reduced. Accordingly, we directed PJM, in a compliance filing, to either reduce its collateral requirement to one day, if appropriate, or explain why maintaining the collateral requirement for two full days was necessary.

¹ See PJM Interconnection, L.L.C., 104 FERC ¶ 61,309 (2003) (September 22, 2003 Order), order on reh'g and compliance filings, 109 FERC ¶ 61,286 (2004) (December 20, 2004 Order).

- 3. We also found that because the credit risks associated with virtual trading in PJM's markets was still relatively new and uncertain, continued review of PJM's credit policies was warranted. Accordingly, we required PJM to file six-month update reports with the Commission for a two-year period, analyzing the effect of its revised credit policies on its markets. We specified that these reports should include information on the extent of virtual trading, suspensions from trading attributable to credit violations, bad debts incurred by PJM, the effect of financial trading on convergence between the Day Ahead and Real Time Markets, and any other information relevant to assessing the effect of PJM's credit policies on its markets.
- 4. PJM submitted its First Update Report on March 22, 2004, in Docket No. ER03-1101-003, and its Second Update Report on September 22, 2004, in Docket No. ER03-1101-005. In the December 20, 2004 Order, we generally accepted, for informational purposes, PJM's First and Second Update Reports, but provided additional guidance on the information PJM would be required to file as a supplement to its reports and in connection with its remaining Update Reports. Specifically, we required PJM to supply, along with the virtual bidding activity information already provided, the number of bidders at issue for the relevant months both before and after its virtual credits policies were implemented. In addition, we required PJM to provide accurate data on the total amount of collateral that virtual traders are required to post.
- 5. The December 20, 2004 Order also required PJM to clarify its calculation of a participant's Credit Available for Virtual Bidding by taking into account all credits owed to a participant by PJM.² In addition, we required PJM to modify its credit risk assessment, basing that assessment on the lesser of: (i) the current calculation of two-days of uncleared bid exposure; and (ii) one day of uncleared exposure plus three days of net cleared exposure, *i.e.*, the difference between cleared virtual demand bids and cleared virtual supply bids.³

PJM's Third Update Report and Responsive Pleadings

6. In PJM's Third Update Report, PJM states that the number and identity of the bidders screened pursuant to its credit policies has not changed over the six-month period reflected in its Second Update Report. Specifically, PJM states that six bidders remain subject to these screening requirements. PJM states that the posted collateral for these

² December 20, 2004 Order, 109 FERC ¶ 61,286 at P 24.

³ *Id.* at P 27.

participants in excess of their peak historical activity is \$2.1 million, which reflects an increase of \$210,000 over the amount reported by PJM in its Second Update Report.⁴

- 7. PJM estimates that for the six-month period reflected in its report (September 2004 through February 2005), 14 market participants engaged in virtual bidding activity, an increase of four market participants since the beginning of 2004. PJM reports that these market participants have posted \$11.8 million in collateral in excess of the amount of collateral required by their peak market activity. PJM states that this increase in trading activity and the amount of collateral voluntarily posted by these participants in excess of that required by their peak cleared market activity, provides a good indication that PJM's credit requirements have not deterred virtual bidding.
- 8. PJM states that since it implemented its virtual bid screening provisions, PJM has not suspended any virtual bidders under its rules and has not incurred any bad debts. Finally, PJM states that its markets continue to reflect a high degree of convergence and that the extent of this convergence does not appear to be affected by its virtual bid screening rules.
- 9. Notice of PJM's Third Update Report was published in the *Federal Register*,⁵ with interventions and protests due on or before April 12, 2005. A joint protest was timely filed by Epic Merchant Energy, LP (Epic) and SESCO Enterprises L.L.C. (SESCO). Epic and SESCO assert that PJM's credit policies continue to depress trading and impose artificial and unduly discriminatory restraints on virtual traders. Epic and SESCO also assert that PJM's credit policies unfairly target, for screening purposes, a subset of virtual traders, even though these policies have not resulted in the suspension of even one virtual bidder. Epic and SESCO request an order from the Commission requiring PJM to either eliminate such screening altogether, or at a minimum to establish a reasonable mechanism under which Participants can be removed from the list of screened traders.
- 10. In addition, Epic and SESCO argue that even virtual traders who are not screened by PJM are subjected to onerous and unduly discriminatory credit requirements. Epic and SESCO note that while most utilities and other traditional PJM Participants are permitted to trade without posting any cash collateral, 14 other Participants that engage in virtual trading have been required to post \$11.8 million in cash or cash equivalent collateral in excess of the amount of collateral required by their peak market trading

⁴ Market participants are required by PJM's credit policy to post collateral sufficient to cover their expected cleared activity for all PJM markets and services, generally based on the highest two consecutive months of activity over a 12-month rolling period. *See* PJM OATT, Att. Q, section II.C.

⁵ 70 Fed. Reg. 17,079 (2004).

activity. Epic and SESCO suggest that there have been no market problems that would warrant these onerous requirements.

- 11. Epic and SESCO also challenge PJM's assertion that PJM's credit policies have not deterred virtual bidding. Epic and SESCO assert that, in fact, PJM has not proven this assertion. In particular, Epic and SESCO point out that while the number of submitted bids for screened Participants have increased since September 2004, the number of submitted megawatts, the number of cleared bids and the number of cleared megawatts have declined. Epic and SESCO add that while more entities are engaging in virtual trades than previously, financial traders are only able to bid for a reduced number of megawatts and their cleared transactions have been reduced by almost 50 percent.
- 12. Epic and SESCO also challenge PJM's assertion that price convergence explains this drop off. Epic and SESCO point out that monthly price data show variances between the Day Ahead and Real Time markets of over eight percent, which would be even more pronounced if PJM data showed the price divergence at individual trading points, or on a seasonal basis.
- 13. Epic and SESCO argue that while virtual traders routinely trade based on price differences at the sub-penny level, PJM appears to be satisfied with Real Time prices that, on average, are \$0.92 higher than Day Ahead prices. Epic and SESCO request an order from the Commission requiring PJM to reduce its credit requirement to one day of bids, or in the alternative, to demonstrate why any extra collateral should be required of virtual traders. Epic and SESCO also note that PJM could greatly reduce the collateral posting burden on virtual traders by applying a 50th percentile Reference Price calculation, as used by the Midwest Independent Transmission System Operator, Inc. (Midwest ISO), rather than using the current 97th percentile calculation. Epic and SESCO state that currently, PJM is requiring credit of at least \$60 to cover an exposure of \$13 or less.

PJM's Fourth Update Report

- 14. In PJM's Fourth Update Report (covering the six-month period March 2005 through August 2005), PJM states that the number and identity of the bidders screened pursuant to its credit policies has risen over the six-month period reflected in its Third Update Report (from six bidders to nine). PJM also states that the number of bids and megawatt-hours submitted and cleared for screened participants has increased compared to the comparable period from last year.
- 15. PJM estimates that for the six-month period reflected in its report, 12 market participants engaged in virtual bidding activity (down from 14 reflected in its Third Update Report). PJM states that for the six-month period reflected in its Fourth Update Report, it was required to suspend one market participant from submitting virtual bids, based on available settlement data which showed that the participant had exceeded its

posted collateral. PJM states that it reinstated that participant after three business days, based on additional settlement data indicating that the participant's collateral had not been exceeded. PJM states that it has not incurred any bad debts. Finally, PJM states that its markets continue to reflect a high degree of convergence between locational marginal prices in the day-ahead and real-time markets, and that convergence does not appear to be affected by PJM's credit policies.

16. Notice of PJM's Fourth Update Reports was published in the *Federal Register*, with interventions and protests due on or before October 13, 2005. None was filed.

Discussion

- 17. We will accept PJM's Third and Fourth Update Reports for filing. More than two years ago, in the September 22, 2003 Order, we accepted, subject to revision, PJM's proposal to implement new credit requirements applicable to participants' virtual trading activities. These trading activities, we noted, had not previously been addressed by, or otherwise fully accounted for in, PJM's credit policies. In accepting PJM's filing, however, we also required PJM to modify its proposal in order to minimize, to the extent feasible, the effects of its revised credit requirements on virtual traders. We also required PJM to file 6-month update reports for a two-year period analyzing the effects of these requirements, as implemented.
- 18. Our concern is that PJM's legitimate interests in managing the financial risks associated with virtual trading activity in its markets be appropriately balanced with the benefits such trading can provide. We have found, for example, that virtual trading activities help promote price convergence between the Day Ahead and Real Time Markets and provide other system benefits. In the orders in this proceeding, we have accepted PJM's credit policies, finding that they establish reasonable collateral requirements commensurate with the financial risks posed by their activities. We also required PJM to file reports so that we could assess the impact of these requirements on

⁶ 70 Fed. Reg. 58,211 (2005).

 $^{^7}$ See September 22, 2003 Order, 104 FERC ¶ 61,309 at P 23; December 20, 2004 Order, 109 FERC ¶ 61,286 at P 27.

⁸ September 22, 2003 Order, 104 FERC ¶ 61,309 at P 26.

⁹ See, e.g., ISO New England, Inc., 113 FERC ¶ 61,055 at P 30 (2005) ("Arbitrageurs provide important benefits to bid-based markets by helping to ensure that Day-Ahead and Real-Time prices to not diverge significantly, as well as by providing price discovery and liquidity to the market.").

the market. Based on these filings, we find no reason to institute additional inquiry into PJM's credit practices.

- 19. PJM asserts in its Fourth Update Report that the number of bids and megawatthours submitted and cleared for screened participants and for all participants was higher, for the six month period reported, compared to the comparable period for the prior year. PJM also reports that, considering all participants engaged in virtual bidding, screened and unscreened, the number of such bidders and the additional collateral they have posted above that required by their cleared activity, was virtually unchanged over the reporting period. In addition, PJM reports that it has experienced a high degree of convergence between locational marginal prices in the Day Ahead and Real Time Markets and that this convergence does not appear to have been affected by the implementation of its virtual bid screening rules. ¹⁰
- 20. Epic and SESCO protest the Third Update, but not the Fourth Update. Based on the Third Report, Epic and SESCO assert that PJM's credit policies may have depressed trading. Epic and SESCO, for example, state that in the Third Report, the number of submitted megawatts, the number of cleared bids, and the number of cleared megawatts have declined. However, the Fourth Report shows that the number of bidders, as well as the number of megawatt hours cleared increased since the previous year. Epic and SESCO also claim that revisions are warranted because PJM, as of the date of the Third Report, had not been required to permanently suspend any participant engaging in virtual trades and has not incurred any bad debts. However, PJM did have to suspend one market participant during period addressed in the Fourth Report. Moreover, the fact that PJM, to date, has not incurred any bad debts does not suggest that PJM is not entitled to require collateral sufficient to cover its risk exposure. PJM's reports show that its credit requirements have not unduly deterred virtual trading. Based on PJM's reports, therefore, the Commission finds no basis to open up a further investigation of PJM's credit requirements.
- 21. Epic and SESCO also maintain that PJM should reduce the collateral burden on virtual traders by applying a 50th percentile reference price as used by the Midwest ISO, rather than PJM's current 97th percentile price. The Midwest ISO's use of this input in its overall credit calculation was made by the Midwest ISO voluntarily, as voted on and

¹⁰ Each of these findings is generally consistent with PJM's Third Update Report, in which PJM concludes that its credit requirements have not deterred virtual bidding.

approved by the members of the Midwest ISO credit practices task force. PJM and the Midwest ISO do not have identical credit provisions and each RTO may voluntarily adopt different credit limits based on their perception of risk. The fact that MISO has adopted a different reference price, therefore, does not necessarily render PJM's reference price unjust and unreasonable, nor establish a precedent that we are required to follow here. Epic and SESCO do not show that it is unreasonable for PJM to conclude that traders in its markets should post sufficient collateral to cover the full extent of their projected risk.

The Commission orders:

PJM's Third and Fourth Update Reports are hereby accepted, as discussed in the body of this order.

By the Commission.

(SEAL)

Magalie R. Salas, Secretary.

¹¹ See Midwest Independent Transmission System Operator, Inc., 110 FERC ¶ 61,289 (2005). The Commission did not require this change; it only asked Midwest ISO to explain why different percentiles were used for energy as opposed to FTR purchases. See Midwest Independent Transmission System Operator, Inc., 109 FERC ¶ 61,285 at P 377 (2005).

¹² For example, PJM has adopted a provision in which virtual traders have an option of posting collateral equal to only one day's exposure for uncleared bids. *PJM Interconnection*, *LLC*, 109 FERC ¶ 61286, at P 27 (2004).